## 132897-2

## CLAIMS:

 A stabilized flame retardant composition comprising: at least one of a polymer resin;

about 5 to 300 parts by weight of a hydrated metal compound per 100 parts by weight of said polymer resin;

an effective stabilizing amount of a synergistic mixture of:

- a) a first stabilizer comprising at least one compound selected from the group consisting of: amine oxide stabilizers, hydroxylamine stabilizers, nitrone stabilizers, nitroxyl stabilizers, benzofuranone stabilizers; quinone methide stabilizers, and monoacrylate esters of 2,2'-alkylidenebisphenol stabilizers; and
- b) a second stabilizer comprising at least one compound selected from the group consisting of phosphite and phosphonite stabilizers.
- 15 2. The stabilized flame retardant composition of claim 1, wherein said hydrated metal compound is a metal hydrates or metal oxide.
  - 3. The stabilized flame retardant composition of claim 1, wherein said metal hydroxide is selected from magnesium hydroxide and aluminum hydroxide.

20

10

- 4. The stabilized flame retardant composition of claim 3, wherein said polymer resin is one of a polypropylene, polyethylene, Polypropylene blends, e.g. thermoplastic olefin (TPO), thermoplastic elastomer (TPE).
- 5. The stabilized flame retardant composition of claim 1, wherein said first stabilizer additive is an amine oxide.
  - 6. The stabilized flame retardant composition of claim 1, wherein said first stabilizer additive is a hydroxyl amine.

30

- 7. The stabilized flame retardant composition of claim 3, containing at least 5 parts by weight of a magnesium hydroxide per 100 parts by weight of a polypropylene.
- A process for the stabilization of a composition comprising at least a polymer resin and about 1 to 100 parts by weight of a hydrated metal compound per 100 parts by weight of said polymer resin, said process comprising adding to a polymer resin composition an effective stabilizing amount of a stabilizer additive selected from one of an amine oxide or a hydroxyl amine.

10

15

20

25

- 9. The process of claim 8, wherein said hydrated metal compound is a metal hydroxide.
- 10. The process of claim 8, wherein said a metal hydroxide is selected from magnesium hydroxide and aluminum hydroxide.
  - 11. The process of claim 8, wherein said polymer resin is a polyolefin.
- 12. A process for forming articles having improved melt stability and color stability, said process comprising the steps of:
  - a) melt blending a composition comprising:
    at least one of a polymeric resin;

about 1 to 100 parts by weight of a hydrated metal compound per 100 parts by weight of said polymeric resin; and

- an effective stabilizing amount of a synergistic mixture of a first stabilizer additive selected from one of an amine oxide or a hydroxyl amine and a second stabilizer additive selected from one of a phosphite or phosphonite stabilizer;
- b) forming shaped articles thereof from said blend.
- 30 13. Articles comprising the composition of claim 1.

## 132897-2

- 14. The process of claim 12, wherein said polymeric resin is one of a polypropylene, polyethylene, or polypropylene blends.
- 15. The process of claim 12, wherein said hydrated metal compound is a metal5 hydrates or metal oxide.
  - 16. The process of claim 12, wherein said stabilizer additive is a hydroxyl amine.
- 17. The stabilized flame retardant composition of claim 3, containing at least 5 parts by weight of a magnesium hydroxide per 100 parts by weight of a polypropylene.
  - 18. The stabilized flame retardant composition of claim 1, further comprising at least one of an alkaline metal oxide, an alkali metal salt, and an alkaline earth metal.
- 15 19. The stabilized flame retardant composition of claim 18, further comprising a calcium carbonate.